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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,063	03/31/2004	Hitoshi Yamamoto	2271/71538	8897
23432	7590	05/26/2006	EXAMINER	
COOPER & DUNHAM, LLP 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			MISIURA, BRIAN THOMAS	
			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,063	<b>Applicant(s)</b> YAMAMOTO ET AL.	
	<b>Examiner</b> Brian T. Misiura	<b>Art Unit</b> 2112	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 64-75 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 12, 13, 17, 23, 24, 28, 34, 35, 39, 44, 45, 49, 54, 55 and 59 is/are rejected.
- 7) ☒ Claim(s) 3-5, 7-11, 13-16, 18-22, 25-27, 29-33, 35-38, 40-43, 46-48, 50-53, 56-58 and 60-63 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____   |

### **Detailed Action**

#### ***Response to Arguments***

Applicant's arguments, filed 3/17/2006, with respect to the rejection(s) of claim(s) 1-9, 11-20, 22-31, 33-66, 68-70, 72-74 under either 35 U.S.C. 102 or 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new ground(s) of rejection have been made.

#### ***Interview Summary***

In a phone interview with Mr. Paul Teng on May 18<sup>th</sup>, 2006, the scope of claim 1 was made clearer to the examiner. A summary of this interview is included with this action.

#### ***Specification***

The disclosure is objected to because of the following informalities: throughout the application the term "non-PCMCIA card" is used to refer to reference numeral 123. Reference numeral 123 is believed to be the card of reference in claim 3. This card is clearly that of the PCMCIA ExpressCard, which is the new form factor for PCMCIA Circuit Cards and may utilize both the USB and PCIe interfaces as described in paragraph 4. Therefore, it is inaccurate to refer to this reference numeral 123 as "non-PCMCIA card". Appropriate correction is required.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The examiner believes the limitation featuring "a first PC card compliant with a specific card standards" is referring

to the PCMCIA card described on pages 20/21 of the applicants specification. However, the "first PC card" of claim 1 must be shown or the feature cancelled from the claims.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 6, 12, 13, 17, 23, 24, 28, 34, 35, 39, 44, 45, 49, 54, 55, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al. U.S. Patent No. 6,684,283 in view of Liu et al. U.S. Application Publication No. 2004/0059860.

Per claims 1, 12, and 23, Harris discloses: a PC card control apparatus, comprising:

- a PC card connector configured to provide connections for connecting one of a PC card compliant with specific card standards (column 3, lines 56-61, figure 5 – specific card standard is CardBay)
- and a card-adapting card for connecting a second PC card compliant with a different card standard to the PC card control apparatus (column 3 lines 37-55, figure 4 – specific card standard is either PC Card (16-bit ) or CardBus);
- a card detector configured to detect connection of the card-adapting card to the PC card control apparatus and to subsequently output a detection signal (column 3 lines 50-55);

Harris does not disclose the switching circuit to switch the connections of the card connector to the appropriate bus for the adapting card.

However, Liu discloses: an interconnection switching circuit configured to switch the connections of the PC card connector to connect the PC card connector to a bus interface dedicated to the second card upon receiving the detection signal from the card detector (paragraph 18, specifically: "As shown in **FIG. 4**, after the system is launched and the double-interface adapter **20** is powered, the double-interface adapter **20** will switch to the correct working mode and activate an appropriate system interface

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according to the system detected by the interface detection and selection circuit 23." – see figure 4).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's claimed invention to incorporate the teaching of Liu into the system of Harris in order to provide an efficient method of selecting the appropriate bus interface for the card being used.

The modification would have been obvious because one having ordinary skill in the art would want to provide an efficient method of selecting the appropriate bus interface for the card being used.

Per claims 2, 13, 24, 35, 45, and 55, Harris discloses: the PC card control apparatus according to claim 1, wherein the specific card standards include a PCMCIA standard (column 3, lines 56-61, figure 5).

Per claims 6, 17, 28, 39, 49, and 59, Harris discloses: the PC card control apparatus according to claim 1, further comprising: a power supply voltage switching circuit configured to switch power supply voltages including first and second power supply voltages supplied to the PC card connector based on the detection signal (column 4 lines 39-46, figure 5).

Per claims 34, 44, and 54, Harris discloses: a PC card control apparatus, comprising:

- a PC card connector configured to provide connections for connecting one of a PC card compliant with specific card standards (column 3, lines 56-61, figure 5 – specific card standard is CardBay)
- and a second PC card compliant with a different card standard to the PC card control apparatus (column 4, lines 13-17, figure 5 – this specifies that card 520 could

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be that of either 16-bit or CardBus, both of which use a different bus standard than the third option which is CardBay);

- a card detector configured to detect insertion of the second PC card in the PC card control apparatus and to subsequently output a detection signal (column 3 lines 50-55, figures 4 and 5, numerals 410 and 515);

Harris does not disclose the switching circuit to switch the connections of the card connector to the appropriate bus for the adapting card.

However, Liu discloses: an interconnection switching circuit configured to switch the connections of the PC card connector to connect the PC card connector to a bus interface dedicated to the second card upon receiving the detection signal from the card detector (paragraph 18, specifically: "As shown in **FIG. 4**, after the system is launched and the double-interface adapter **20** is powered, the double-interface adapter **20** will switch to the correct working mode and activate an appropriate system interface according to the system detected by the interface detection and selection circuit 23." – see figure 4).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's claimed invention to incorporate the teaching of Liu into the system of Harris in order to provide an efficient method of selecting the appropriate bus interface for the card being used.

The modification would have been obvious because one having ordinary skill in the art would want to provide an efficient method of selecting the appropriate bus interface for the card being used.

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***Allowable Subject Matter***

Claims 3-5, 7-11, 13-16, 18-22, 25-27, 29-33, 35-38, 40-43, 46-48, 50-53, 56-58, and 60-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 64-75 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 64, 68, and 72 are considered to be containing allowable subject matter, primarily due to the fact that they all claim "a regulator configured to regulate a power supply voltage supplied by the PC card control apparatus in order to adapt the power supply voltage for the second PC card." This limitation in combination with all other existing limitations of claims 64, 68, and 72 put claims 64-75 in condition for allowance.

Prior art found for this case often contained a means of regulating the voltage for the second PC card, however no references found contained the regulator within the passive-adaptor card itself.

Claims 65-67, 69-71, and 73-75 inherit the allowable subject matter of Claims 64, 68, and 72.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Misiura whose telephone number is (571) 272-0889. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571)272-3676. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Bina Mishra*

*5/24/2006*

  
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SUPERVISORY PATENT EXAMINER  
*5/24/06*